

REMARKS

Claims 2-5 and 7-22 remain in the case and new Claim 23 has been added. New Claim 23 is similar to, but more narrow, than claim 7. Favorable reconsideration of the above-identified application in view of the foregoing amendments and following remarks is respectfully requested.

Allowed Subject Matter:

Allowance of claims 21 and 22 is appreciated.

Claim Objections:

Claims 9-11, 13, 15, and 18-20 have been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 9 is currently amended to include the limitations of base Claim 1 and intervening Claims 6, 7 and 8.

Claim 15 is currently amended to include the limitations of base Claim 1 and intervening Claims 6, 7 and 14.

Consequently, Claims 9-11, 13, 15, and 18-20 are now in a condition for allowance.

Claim Rejections - 35 USC §102:

Claims 1, 6, and 16-17 have been rejected under 35 USC §102(b) as being anticipated by Nakashima, U.S. Patent No. 6,182,640. The Applicant respectfully conforms in-part, without prejudice, and traverses the rejection in part.

Claims 1 and 6 are cancelled without prejudice, hence, the rejections of Claims 1 and 6 are moot.

In regards to Claim 16, the Nakashima '640 fuel tank does not have a forward portion which is global in shape as is the global portion (32) of the present application. Regardless, Claim 16 is currently amended to specify a "tear-drop" shaped tank (18) (support in par. 18 of application), is currently amended to specify a rearward portion (36) which converges in a rearward direction, and is currently amended to specify that the fuel pump subassembly (16) projects rearward into the rearward portion (36). In contrast, the subassembly (33) of Nakashima '640 does not project rearward into a converging portion and instead projects forward into a diverging region of the tank (1).

In regards to Claim 17, the Nakashima '640 filter (4) is not in contact with both a bottom wall and side wall of the fuel tank (see FIGS. 1 and 3). Hence, Claim 17 is not anticipated by Nakashima '640.

Consequently, currently amended Claim 16 and dependent Claim 17, of the present invention are not anticipated by Nakashima '640 under USC §102(b).

Claim Rejections - 35 USC §103:

Claims 2-5, 7-8, and 14 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Nakashima, U.S. Patent 6,182,640, in view of Horiuchi, U.S. Patent 6,378,504. The Applicant respectfully traverses the rejection.

In regards to Claim 2, the first Office Action admits that the Nakashima '640 reference does not teach the pressure regulator (64) of Claim 2 of the present application being located in the fuel tank. The Office Action, however, contends that adding an in-tank pressure regulator to Nakashima '640 would be obvious in view of Horiuchi '504.

The proposed combination, however, is not obvious because there is no teaching or suggestion anywhere in the references to make such a combination. In fact, the Nakashima '640 reference teaches away from such a combination because it's primary intent resolves problems associated with external pressure regulators and heated fuel flow returning to the tank. Column 1, lines 28-34, of Nakashima '640 states:

"In the foregoing related art, the fuel returned via the fuel return pipe contains a lot of gases. The fuel pump draws up such returned fuel when the fuel in either the fuel tank or the subsidiary tank is nearly reduced to a lower limit. Therefore, the engine sometimes suffers from a surge. In such a case, the mesh filter in the strainer does not contribute to separation of gases from the fuel."

Throughout the Nakashima '640 reference, a fuel-absorbing sponge or member (35) is taught having a primary purpose of receiving heated return fuel and gases from an external pressure regulator (9); see column 1, lines 44-55; and columns 3-4, lines 54-67 and lines 1-13. Note that column 4, lines 35-41 specifically state:

"The fuel returned and discharged onto the fuel-absorbing member 35 via the tip 42 of the fuel return pipe 10 contains a relatively large amount of gases. However, the gases pass through the pores of the fuel-absorbing member and are sifted from the returned fuel, so that the fuel remains absorbed on the fuel-absorbing member 35 as liquid fuel, and stays near the strainer 4."

Nakashima '640 describes a problem created by heated return fuel from an external pressure regulator (9) and attempts to resolve this problem by adding the sponge (35) inside the tank. The present application resolves the problem in a completely different way by placing the pressure regulator (64) in the tank and eliminating the return fuel line

and thus the potential need for a sponge altogether, thus there can be no teaching or suggestion to combine the references.

Because the references do not teach or suggest, individually or in combination, the bottom mounted fuel pump subassembly (16) having a pressure regulator (64) of the present application, Claim 2 is non-obvious and patentable over Nakashima '640 in view of Horiuchi '504.

In addition, because base Claim 2 is patentable, dependent Claims 3-5 are non-obvious and patentable. If an independent claim is non-obvious under 35 U.S.C. §103, then any claim depending therefrom is non-obvious, In re Fine, 837 F.2d 1071, 5USPQ2d 1596 (Fed. Cir. 1988).

In further regards to Claim 3 of the present application, the Nakashima '640 and Horiuchi '504 references do not teach individually or in combination the fuel filter (62) of the present application which projects upward from a bottom flange (40). The filter (6) of Nakashima '640 is suspended between two hoses (5, 38) and the filter (3) of Horiuchi '504 projects downward from bracket/flange (5). Hence, Claim 3 is non-obvious and patentable over Nakashima '640 in view of Horiuchi '504.

In further regards to Claim 4 of the present application, the Nakashima '640 and Horiuchi '504 references do not teach individually or in combination the fuel level sensor (70) of the present application which is mounted to a bottom flange (40). In fact, Nakashima '640 and Horiuchi '504 do not teach about level sensors what-so-ever. Hence, Claim 4 is non-obvious and patentable over Nakashima '640 in view of Horiuchi '504.

In further regards to Claim 5 of the present application, the Nakashima '640 and Horiuchi '504 references do not teach individually or in combination the electrical connector (2) of the present application formed unitarily to a bottom flange (40). In fact, Nakashima '640 and Horiuchi '504 do not teach about electrical connectors what-so-ever. Hence, Claim 5 is non-obvious and patentable over Nakashima '640 in view of Horiuchi '504.

In regards to Claims 7, 12 and 14, the Nakashima '640 reference does not identify or suggest a problem with vibration, hence, does not teach or suggest any resolution. In fact, Nakashima '640 and Horiuchi '504 do not teach the vibration dampening member or grommet (90), nor two feet (82), at all, see column 3, lines 39-44 of Nakashima '640. Hence, Claims 7, 12 and 14 are non-obvious and patentable over Nakashima '640 in view of Horiuchi '504.

In regards to Claim 8, the Nakashima '640 and Horiuchi '504 references do not teach individually or in combination the bridging portion (75) of the bracket (50) which supports the fuel pump. The second edition of the American Heritage Dictionary defines "bridge" as:

"A structure spanning and providing passage over....obstacle." and "Something resembling or analogous to a bridge in form or function."

The bracket (37) of Nakashima '640 is not supported at its distal end and is not a bridge nor functions as a bridge. Hence, Claim 8 is non-obvious and patentable over Nakashima '640 in view of Horiuchi '504.

Summary:

Please reconsider and allow Claims 2-5 and 7-22 and new Claim 23 in view of the above amendments and remarks.

A marked-up copy of the Claim amendments is attached to facilitate examination. Additions are underlined and deletions are stricken out.

A check in the amount of \$800 was submitted in the previous response, mailed December 21, 2004, to cover the fee for independent claims. Moreover, the Commissioner is hereby authorized to charge any deficiencies, or credit any overpayment associated with this communication to Deposit Account No. 50-0852.

Respectfully submitted,

REISING, ETHINGTON, BARNES,
KISSELDE, P.C.



David A. Burns, Esq.
Registration No. 46,238
P.O. Box 4390
Troy, Michigan 48099
(248) 689-3500

Date: January 25, 2005

DAB:ry